

REMARKS

The application has been amended and is believed to be in condition for allowance.

Amendments to the Disclosure

Claims 10, 11, and 12 are amended to overcome the Official Action's formal objection and rejections.

Claim 14 is amended to overcome the Official Action's rejection under Section 101 with regard to computer-related subject matter. The amendments find support in the specification and the drawing figures as originally filed (e.g., page 11 line 25 to page 12 line 21; Figure 5). Claim 16 is canceled without prejudice.

The claims are further amended to address antecedent basis issues and formal issues in consideration of readability U.S. practice and preferences.

For example, claim 5 is amended to re cite the sections of the second gear ratio in the vehicle transmission is conditioned upon a comparison of information indicating the first degree of plugging of the filter and a predetermined boundary value. The amendment finds support in the specification as originally filed (e.g., page 10, lines 8-13).

The foregoing amendments to the claims do not introduce new matter.

Formal Matters - Objections to the Claims

The Official Action objected to claim 10 due to an informality.

In response, claim 10 is amended as above in a manner believed to overcome the Official Action's objection. Withdrawal of the objection to claim 10 is thereby respectfully solicited.

Formal Matters - Section 112, second paragraph

The Official Action rejected claims 11 and 12 under 35 USC 112, second paragraph as being indefinite, citing antecedent basis issues.

In response, claims 11 and 12 are amended in a manner believed to overcome the Official Action's rejections. Withdrawal of the rejections under 35 USC 112, second paragraph are thereby respectfully requested.

Formal Matters - Section 101

The Official Action rejected claims 14 and 16 as being directed to non-statutory subject matter.

In response, claim 16 is canceled as indicated above, and claim 14 is amended in a manner believed to overcome the Official Action's rejections.

In particular, claim 14 is amended to recite physical computer readable recording medium that tangibly records a program comprising program code configured to execute on a computer comprising a processor, a memory, and a means for

reading from computer readable recording medium, said program code causing the computer to perform the method steps of claim 1.

It is respectfully submitted that claim 14 recites subject matter consistent with consistent with page 11 line 25 to page 12 line 21 of the specification as originally filed and is directed to patentable subject matter. Withdrawal of the rejections under 35 USC 101 are thereby respectfully requested.

Substantive Issues - Section 103

The Official Action rejected claims 1, 3-8, and 10-16 under 35 USC 103(a) as being unpatentable over Bunting et al. (US Pub. 2003/0145582; "BUNTING") in view of Lemaire et al. (US 6,093,223; "LEMAIRE").

The Official Action rejected claims 2 and 9 under 35 USC 103(a) as being unpatentable over BUNTING and LEMAIER, and further in view of Hsiao et al. (US 5,891,409; "HSIAO") and Brenner et al. (US Pub. 2003/0168116; "BRENNER").

The rejections are respectfully traversed for at least the reasons that follow.

It is respectfully submitted that none of the cited references, individually or in combination, teach or suggest a method for controlling a drivetrain (that is, an engine and a transmission) in order to clean a filter based on different types of particles, as recited in the independent claims.

The Official Action offers BUNTING as teaching a method of regenerating a particle trap exhaust filter during operation

of a vehicle that has an internal combustion engine with a filter that receives exhaust from the internal combustion engine, wherein gear ratios are switched in order to produce different exhaust gas temperatures resulting in a regeneration (i.e., cleaning) of the particle trap filter (paragraph 14 of the Official Action spanning pages 4 and 5).

However, BUNTING only teaches a temperature limit which has to be overcome in order to obtain its regeneration. This temperature is selected so to perform an adequate regeneration of a filter clogged with an assumed mixture of particles of different types, where perhaps a certain type is overrepresented. No disclosure of different types of particles, and how to clean a filter from said different types of particles, is either taught or suggested as recited in the claims of the present invention.

In contrast to the claimed invention, BUNTING discloses an arrangement for controlling engine speed and load so as to control exhaust temperature in order to obtain proper regeneration. For example, Figure 2b describes in steps 134 and 136 a prevailing condition of exhaust flow and a degree of clogging (by measuring pressure differential over the filter).

When prevailing condition has been registered a regeneration parameter (RP) is determined in order to select the proper engine and transmission control strategy and eventually the right exhaust temperature (see, e.g., paragraph [0059]). Thus, the RP is selected in dependence of said prevailing

condition (136, 134). BUNTING teaches how to select an RP in order to increase or decrease exhaust temperature (see, e.g., paragraph [0077]).

BUNTING, either individually or in combination with the other references applied by the Official Action, fails to teach any of:

- first selecting a first gear so that a first temperature can be obtained in order to clean said filter from a first type of particles, and then...

- selecting a second gear so that a second temperature can be obtained in order to clean said filter from a second type of particles,

as recited in independent claims 1 and 7.

It is therefore respectfully submitted that independent claims 1 and 7 are patentable over the references applied by the Official Action.

From the foregoing, it will be apparent that Applicants have fully responded to the October 9, 2009 Official Action and that the claims as presented are patentable. In view of this, Applicants respectfully request reconsideration of the claims, as presented, and their early passage to issue.

In order to expedite the prosecution of this case, the Examiner is invited to telephone the attorney for Applicants at the number provided below if the Examiner is of the opinion that

further discussion of this case would be helpful in advancing prosecution.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Jeremy G. Mereness/
Jeremy G. Mereness, Reg. No. 63,422
209 Madison Street
Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

JGM/fb